

FLOODS.

Armidale has never been subjected to the major flooding experienced in areas such as the Hunter Valley and the North Coast. But Armidale is divided by Dumaresq Creek and flooding has at various times damaged properties on the creeklands, destroyed or damaged bridges, footbridges and crossings and prevented access to South or North Armidale respectively.

The *Armidale Express*, 4 April 1863 described a great flood at Armidale. Floodwaters entered several cottages owned by storekeeper John Trim as well as his store close to the Dumaresq Creek. Gardens and paling fences were washed away and Mr Allingham's mill in Beardy Street could only be reached by horseback. 'Residents of 17 or 18 years at Armidale' informed the *Express*, 'the flood ... was the highest they had seen in Armidale'.

Heavy rain in February 1878 led to complaints from Messrs A.J. Zeiner, W. Saggus, A. Edwards and George Beckingham 'about the damage done to their properties by the late rains, and asking the Council to take steps to remedy the evil'.¹ Following damage done by recent rains in March 1880, letters were received by council from 'J.J. O'Keefe and others, J. Scholes, Sen. P. Sheridan, J.W. Mitchell, on behalf of W. Gordon'.² That month, Ald. Mallam attempted unsuccessfully to have action taken to enlarge the culverts at the corner of Taylor and Beardy Streets 'to enable the vast body of water to find its way to the creek in flood times, and prevent the houses in the neighbourhood being flooded'.³

Great damage was done to the roads in Armidale through heavy rains in March 1891 and the council clerk was directed to write to the Minister for Works seeking 'a grant of at least £1000 ... to help to meet the heavy demand on their funds'.⁴ In August council was informed that the Department of Public Works had declined the request. Fourteen ratepayers petitioned council in November 1892 concerning the dangerous state of Marsh Street because 'during flood time they are cut off from the town owing to the overflow of the creek'.⁵ Council took action to have the bridge extended and referred the state of the road to the works committee.

The *Armidale Express*, 14 March 1893 described 'the highest flood on record'. Again occupants of Trim's cottages were evacuated, great damage was done to the chinaman's garden on the north side of the creek and damage to the gasworks was considerable. In a report prepared by the divisional engineer on the Marsh Street bridge and forwarded to council in February 1894 stated the flood 'gave over 4ft.

¹ *Armidale Express*, 1 March 1878, p.4.

² *Armidale Express*, 12 March 1880, p.4.

³ *Armidale Express*, 26 March 1880, p.4.

⁴ *Armidale Express*, 27 March 1891, p.7.

⁵ *Armidale Express*, 25 November 1892, p.3.

of water at (the) foot of (the) approach⁶ to the bridge. A year later, the *Armidale Express*, 29 January 1895 described a further flood following heavy rain. Apart from washing away some fences, no damage was done but 'the water overflowed Beardy-st., in the vicinity of the gasworks and also flooded some of the cottages in Falconer-street on the banks of the creek'.

In April 1908 severe damage was done to the Dumaresq creek by a recent flood and S. Herbert, District Works Officer asked for an estimate to be prepared for the damage and cost of repairs.

The largest flood for 27 years created real danger to the gasworks on Saturday 11 June 1921. One hundred and nineteen points of rain fell in the previous evening and eighteen inches of water extinguished the furnace in the ten operating retorts and swept away a large supply of coke at 5.30 a.m., the following morning. At the council meeting held on Monday 13 June, the mayor reported only through the prompt and continuous work of the employees, was danger averted. He added the lighting committee would consider the creation of a higher wall around the gasworks. A further flood inundated the Dumaresq Creek in November 1924, entered the gasworks from the creek and Beardy Street and extinguished the fires in the retort house. Families were also evacuated whilst Cleghorn's Garage and Lou On's shop in Beardy Street were flooded and the wooden fence at the City Baths was destroyed.

A phenomenal storm of 253 points on Sunday 3 January 1926 led to a substantial bill for council to repair the damage. 'Roads, bridges, and gutters throughout the municipality suffered considerably'.⁷ Two years later, a severe storm to the west of Armidale on the evening of Monday 16 January 1928 led to the flooding of Dumaresq Street and the gasworks property. Early warning meant the Gasworks Manager, J. Simpson 'erected banks to prevent the water entering the retort house'.⁸

Again in February there was flood which inundated several homes and completely flooded the gasworks. Five months later a snow storm accompanied by heavy rain occurred on Tuesday 26 June. That morning, the Dumaresq Creek broke its banks and covered the flats. Water entered Beardy Street near the gasworks and 'although the contractors for the new retort house and other improvements, costing about £7000, had fortunately advanced to such an extent that although the works were surrounded by water, the new work was not damaged'.⁹ That afternoon the furnaces were affected and the manufacture of gas was interrupted; consequently, council appealed to consumers to economise to the greatest extent possible.

⁶ *Armidale Express*, 6 February 1894, p.7.

⁷ *Armidale Chronicle*, 6 January 1926, p.4.

⁸ *Armidale Chronicle*, 18 January 1928, p.8.

⁹ *Armidale Chronicle*, 27 June 1928, p.4.

Damage from subsidence caused by flood on the approaches to the recently installed bridge in Marsh Sreet was tabled to council and forwarded to the Main Roads Board by engineer King in February 1929.

A severe flash flood occurred in February 1931 and caused the evacuation of campers in Jessie Street. Another flood occurred in April and entered the gasworks property but the retorts were too high to be damaged. While a small store in Beardy Street and the new football field under construction were both flooded, a brick wall protected the swimming pool.

The Dumaresq Creek flooded on Thursday 13 October 1932 and flooded the caravan park and low lying areas of Beardy Street between Markham and Allingham Streets. The bridge at the Armidale baths was swept away as was the footbridge near the gasworks. A violent storm occurred on Sunday 22 January 1933. Flood waters reached Mallaby's soap works whilst flood waters surrounded the gasworks and baths. 'Beardy-street between Allingham and Markham streets, was completely inundated ...'.¹⁰ The footbridge leading to the baths was again swept away again but the component parts were recovered.

The *Armidale Express*, 29 January 1934 reported a torrential downpour which flooded Butler and Markham Streets. 'The Gas Works was entered, but the embankments around the retort house and the main works prevented any damage being done'. Armidale suffered an extensive flood on the evening of Monday 14 January 1935. The rapidly rising flood flowed over every street running north and south from Niagara to Douglas Streets. The Markham-street bridge was submerged by about a foot of swiftly running water. The water entered the Dumaresq Street homes between Dangar and Faulkner Streets, J. Mallaby's soap works and backed up against the paling fence of Rugby League Park. The construction of high ramps and banks protected the gasworks but they were 'set like an island in the water'.¹¹

In February 1947 two storms 'overflowed Dumaresq Creek in several places throught the town; flooded streets and yards in low-lying creek areas; flooded shops in Beardy-street; held up road traffic ... at Tilbuster Creek and caused a minor washway on the railway line near the overhead bridge'.¹² Following the 785 points recorded during February, a further flood on Saturday 1 March 1947, 'was the highest since 1931'.¹³ The flood caused the cessation of gas production.

The Dumaresq Creek reached its highest flood level for many years in January 1948. Curis Park and the playground area was completely covered; water lapped

¹⁰ *Armidale Express*, 23 January 1933, p.4.

¹¹ *Armidale Express*, 16 January 1935, p.4.

¹² *Armidale Express*, 24 February 1947, p.6.

¹³ *Armidale Express*, 3 March 1947, p.6.

the building of the New England Butter Factory; Albion Park was completely under water and Briffed? Timbers at the rear of the gasworks was completely inundated.

The August 1949 flood was described as 'Armidale's biggest flood for at least half a century'.¹⁴ It inundated 230 acres; flooded fifteen homes and affected the swimming pool, steam laundry, gasworks and Brinad timber mills. It covered Rugby League park, Harris Park hockey field, Curtis Park children's playground; destroyed the O'Dell Street footbridge; put the Douglas Street sewage pumping plant out of action and flooded the sewer and gas service mains. The *Armidale Express*, 29 August 1949 reported that only twice in 69 years had the rainfall in any one month exceeded 10 inches. 'In February, 1895, it was 1003, and in February, 1928, it was 1031'.

Following the major flood in August, residents presented a petition to council requesting the removal of the northern approach to Stephen's bridge. Council referred the petition to the Main Roads Department. On Friday 9 September lectures were cancelled at the New England University College because of rising flood waters. Low lying areas of the creeklands were again covered by flood on 5 October.

Following a total rainfall of 980 points for the month of June in 1950, a flood on Saturday 24 June forced the evacuation of six families, 'cut off the Armidale gas sulpply, interrupted transport services and damaged roads, bridges and fences'.¹⁵ Three weeks later another flood occurred because of the silting of the creek and again put the gasworks out of action as well as flooding the pool with 30 inches of mud and water. The swimming pool proprietor Tom Monckton claimed 'we are now suffering in Armidale from 20 years of inattention and neglect of the waterways'.¹⁶ A flood on Wednesday 22 November 1950 cut the University College off from the town and although it threatened the gasworks it did not interrupt the gas supplies. Dr R.B. Madgwick, warden of the University College appealed to council to overcome the inconvenience.

In January 1951 the works committee submitted a report that 'proposed flood control of Dumaresq Creek is still under consideration' and 'the Water Conservation and Irrigation Commission is to approached'.¹⁷ Despite acceptance of the report, council rejected a proposal by Ald. T.G. Mockton that it provide £5000 on improving Dumaresq Creek drainage. But in February council formally moved a motion to seek a visit of a commision officer and report on prevention of possible flooding in the city area. The Chamber of Commerce supported the request and following an inspection by an officer it was reported 'major flood

¹⁴ *Armidale Express*, 26 August 1949, p.8.

¹⁵ *Armidale Express*, 26 June 1950, p.4.

¹⁶ *Armidale Express*, 12 July 1950, p.16.

¹⁷ *Armidale Express*, 17 January 1951, p.4.

control work on Dumaresq Creek is not considered warranted'.¹⁸ Four years later, Ald P.G. Love again urged council 'to press for expert investigation of the Dumaresq Creek flood problem'¹⁹ in March 1955.

The Dumaresq Creek broke its banks twice in August 1952. Houses near the creek were flooded as well as Albion and Harris Parks; the gasworks was flooded as well but distribution was not interrupted. The level was 'only 6 inches below the level reached by the record floods reached in 1949'.²⁰

A major flood occurred on Thursday 9 February 1956 and forced the evacuation of families in Beardy and Dangar Streets. Water entered Beardy Street, the Olympic Pool and Albion Park and cut off supply at the gasworks. For the first time since 1950, water cut the highway at the northern side of the Marsh Street bridge.

A sudden flood occurred in January 1962 and Beardy Street was closed with the water stretching from above the gasworks to Markham Street. The gasworks remained high and dry but the university was evacuated. Early in May 1963 the biggest flood since 1949 threatened the gasworks, 'where water was three feet deep in the yard, and got to a foot of the furnaces'.²¹ Action was taken to ensure that coke was available to allow for the charging of the retorts. Again the road to the university was cut and lectures cancelled.

A near record flood occurred in Armidale on Tuesday 14 January 1964. The heavy rain and sudden flood forced the evacuation of five families; flooded many other cottages and shops; cut links between North and South Armidale for two hours; isolated the university; pushed the gas stock down to one hour's supply; halted traffic at Saumarez on the New England Highway for six hours; endangered the filtration plant, swamped the sewerage system and shut down the Airport. A week later the city engineer P.G. Agnew estimated the flood damage exceeded £2550 but 'this estimate excluded the extensive damage caused at the gas works'.²²

Agnew presented a report on the prevention of floods to low lying areas of Armidale in February 1964. Based on a scheme adopted by council in November 1959 and estimated to cost over £100 000 it included 'straightening, widening and desilting the creek over a period of years'.²³ Council announced its intention to probably spend £11 500 in 1964 on Dumaresq Creek flood mitigation between Marsh and Douglas Streets. The money was to be made up a £5000 loan, a £5000

¹⁸ *Armidale Express*, 29 August 1951, p.3.

¹⁹ *Armidale Express*, 9 March 1955, p.8.

²⁰ *Armidale Express*, 15 August 1952, p.6.

²¹ *Armidale Express*, 8 May 1963, p.1.

²² *Armidale Express*, 29 January 1964, p.8.

²³ *Armidale Express*, 12 February 1964, p.7.

grant from Water and Conservation Commission and £1500 from council's gas works fund.

A proposal by Cliff Wright Motors to build a motor show room and workshop on land zoned open space on the northern side of Dumaresq Creek was rejected by council. The decision led to an appeal to the State Planning Authority, supported by council in November 1968. Opposition to the proposal was expressed by the Improvement and Beautification committee. It was claimed 'two bridges over Dumaresq Creek are responsible for the heightening of the creek floods ... the Stephens Bridge, built in 1928 ... and the footbridge in Faulkner Street built by the council in 1959'.²⁴

A tragedy occurred on Thursday 30 January 1970 when Mrs Joan Sauer, a mother of four children was drowned when a car in which she was a passenger was swept off the Donnelly Street crossing at Dumaresq Creek. Twelve months later in January 1971, the New England Highway was cut by floods and some houses in low lying areas were isolated. Some minor damage was also done to the Niagara Street bridge works. The *Armidale Express*, 31 December 1971 correspondent in reviewing events of the year stated: 'Armidale experienced its worst floods for seven years'.

Relief from flooding of Armidale on the western side of Armidale was provided by a \$25 000 scheme which included a trench dug from the brick pits towards the Pastures Protection Reserve. The scheme was 'to divert the storm waters from the Kellys Plain's Road area across the New England Highway and Kentucky Street into Niagara Street'.²⁵

Heavy rain in January and February 1976 caused washways and closed all low level crossings to traffic.

The State Government issued a policy statement in 1977 concerning urban development in flood liable areas because of the growing cost of flood damages. In September council requested the Water Resources Commission to undertake a survey of such land in Armidale. In their initial reply, the commission noted: improvements by the Red Scheme; the highest flood in March and April 1950 and work by the Geography Department of the University of New England including a post graduate project involving the studies of two tributary creeks and changes in the channel of Dumaresq Creek. The Dumaresq Shire also requested a study at the same time.

Approval was given for the establishment of gauging stations in October 1978 at Dumaresq Creek (upstream from Stephens Bridge) and Commissioners Water (downstream from Puddledock Road). These stations were to provide data for flood plain mapping. In the following year, council applied for £6000 for the

²⁴ *Armidale Express*, 8 November 1968, p.17.

²⁵ *Armidale Express*, 2 July 1971, p.14.

construction of a hydraulic model of Dumaresq Creek. Discussions took place with the School of Natural Resources at the University of New England and in October it was announced the model would be constructed and held at the University. But in April 1986, Dr Ian Fisher of the Department of Resource Engineering at the university informed council of the intention to break up the model.

By November 1983 a flood inundation map for Armidale had been completed and it was publicly displayed for six weeks from December. Because of the problem of undue hardship to property owners, a revised policy was issued by the government in December 1984. In September 1985 the Water Resources Commission reported to council and their records indicated:

Significant floods occurred in 1928, 1948, 1949, 1950, 1956, 1963, 1964 January and February 1984. Floods of a less serious nature included 1947, 1950, 1952, 1953, 1974 and 1978. The highest recorded flood to that stage had occurred in 1949.

A draft copy of the Flood Study Report undertaken by the Water Resources Commission of N.S.W. was forwarded to council in July 1986 and the final report in September.

In 1991 consultants completed a further flood study to draft stage. This study was to be the major input 'to the Flood Plain Management Committee's deliberations and advice to council for the establishment of Flood Plain Management Policy'.²⁶

²⁶ Armidale City Council, *Annual Report and Community Directory*, 1991/1992, p. 26.